COMPUTE-SUPPORTED COLLOBRATIVE LEARNING (CSCL) VIA SOCIAL NETWORKING IN MATHEMATICS

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To my beloved father and mother

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ABSTRACT

This research were designed to identify students' interest towards computer supported learning process for mathematics lesson, students interest on the use of Geogebra in mathematics lesson and students' perception on collaborative learning through social networking. This study deploys mixed method which is a combination of quantitative (Questionnaire) and qualitative (interviews) approach where students were taught transformation topic with the aid of Geogebra software and allowed to interact through social networking site (Facebook) to complete the activities given. 30 of Form two students were involved in the quantitative study who give their response to the questionnaire while five students were selected for qualitative study who participate in the interview session. Results of mean analysis showed that students perceived high level of interest towards computer supported learning process for mathematics lesson with M=4.56. Besides that, students also perceived high level of interest on the use of Geogebra in mathematics lesson with M=4.40. Lastly, students have a positive perception on collaborative learning through social networking with M=4.55. Results from the qualitative study also support the findings of quantitative study which the students stated that Geogebra software is very helpful in learning mathematics and very effective in cascading complex matters through easier method. In terms of collaborative learning, Facebook is an effective collaborative learning medium.which enables easier communication and effective idea sharing session. The study shows that students have displayed positive attitude towards mathematics lesson with the use of Geogebra software and social networking site.

ABSTRAK

Kajian ini dijalankan bertujuan untuk menentukan minat pelajar terhadap proses pembelajaran berbantukan komputer dan penggunaan Geogebra dalam pengajaran Matematik serta untuk mengenalpasti persepsi pelajar terhadap pembelajaran kolaboratif melalui rangkaian sosial. Kajian ini menggunakan kaedah campuran yang merupakan gabungan pendekatan kuantitatif (soal selidik) dan kualitatif (temubual) di mana pelajar diajar topik transformasi dengan bantuan perisian Geogebra dan dibenarkan untuk berinteraksi melalui laman rangkaian sosial (Facebook) untuk menyiapkan aktiviti yang diberikan. 30 orang pelajar Tingakatan Dua terlibat dalam kajian kuantitatif yang memberikan maklum balas kepada soal selidik manakala lima orang dipilih untuk kajian kualitatif bagi tujuan temubual. Hasil analisis min menunjukkan bahawa pelajar memperlihatkan tahap minat yang tinggi terhadap pengajaran berbantukan komputer dengan nilai M=4.56. Selain itu, pelajar juga menunjukkan tahap minat yang tinggi terhadap penggunaan Geogebra dalam pengakaran matematik dengan nilai M=4.40. Akhir sekali, pelajar mempunyai persepsi yang positif terhadap pembelajaran kolaboratif melalui rangkaian sosial dengan nilai M=4.55. Dapatan daripada kajian kualitatif menyokong dapatan daripada kajian kuantitatif yang mana pelajar menyatakan bahawa perisian Geogebra banyak membantu mereka dalam pengajaran matematik dan sangat berkesan dalam menyelesaikan perkara komplek melalui kaedah yang lebih mudah. Dari segi pembelajaran kolaboratif, Facebook dikatan medium pembelajaran kolaboratif yang berkesan yang membolehkan Kedua-dua analisis kuantitatif dan kualitatif menunjukkan bahawa pelajar mempunyai persepsi yang positif terhadap Pembelajaran Kolaboratif Berbantukan Komputer, penggunaan perisian Geogebra serta laman rangkaian sosial sebagai medium pembelajaran kolaboratif, yang membolehkan komunikasi berlaku dengan lebih mudah disamping dapat berkongsi idea. Kesimpulannya, kajian ini menunjukkan bahawa pelajar menunjukkan sikap yang positif terhadap pengajaran matematik dengan penggunaan perisian Geogebra dan laman rangkaian sosial.